

Claims 1-20 (canceled)

21. (Currently amended) A multilayer solid-state device for producing electrical power from light comprising:

a light energy conversion layer;

a two-sided conducting layer having the light energy conversion layer secured to a first side thereof;

a charge separation layer secured to a second side of the conducting layer; and

the conducting layer ballistically transports charge carriers from the light energy conversion layer to the charge separation layer which eliminates the need for an electrolyte when producing electrical power from light that impinges upon the light energy conversion layer;

The multi-layer solid-state device for producing electrical power from light according to claim 1 wherein the conducting layer and the charge separation layer define a metal-insulator-semiconductor junction.

Claims 22-31 (canceled)

33. (Currently amended) A multi-layer solid-state device for producing electrical power from light comprising:

a light energy conversion layer containing photosensitive means;

an ultra-thin, two sided, electrically conducting front contact layer having the light energy conversion layer secured to a first side thereof;

a two sided semiconductor charge separation layer having one side thereof secured to the second side of the front contact layer;

the front contact layer ballistically transports electrical energy from the light energy conversion layer to the charge separation layer which eliminates the need for an electrolyte when producing electrical power from light that impinges upon the light energy conversion layer; and

an electrically conductive metal back contact secured to the second side of the charge separation layer;

The multi-layer solid-state device for producing electrical power from light according to claim 34 wherein the front contact layer and the semiconductor charge separation layer define a metal-insulator-semiconductor junction which maximizes output power.

Claims 34-101 (canceled)